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## Perception of Community Health Extension Services among Women in a Rural Community in Ilorin East, Kwara State, Nigeria

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### ABSTRACT

**Background:** Rural women in developing countries, including Nigeria are faced with a number of health problems with very limited access to health care facilities. This study assessed the perception of women in rural areas on community health extension services in Ilorin, Kwara State.

**Methods:** One hundred and twenty rural dwelling women were sampled from six rural communities selected by simple random sampling method. A structured questionnaire was used for data collection. Data was analyzed using SPSS version 18. Level of significance was set at  $p$ -value of  $\leq 0.05$ .

**Results:** The mean age of the respondents was 45 years and 69.3% of them were married. Over a third (36.7%) of the respondents, had no formal education and 40.0% were farmers with an average monthly income of ₦14,146.00. High awareness level on community health extension services was observed but 65.5% lived at a distance beyond 3 km from the health centers and they usually trek to the facilities. Maternal, child care services and first aid treatment were available; however, mental health was poorly ranked in terms of effectiveness of community health extension services provided in the area. Age ( $p < 0.001$ ) was inversely significant while educational level ( $r = 0.334$ ,  $p < 0.01$ ) was positively related to the frequency of availability of community health extension services.

**Conclusion:** The respondents were aware of community health extension services, however, most of them live far from the health facilities. We recommend that Community Health Extension Workers should embark on home visits in order to improve access to health services in the rural communities.

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## INTRODUCTION

Rural development in Africa cannot be achieved without the active participation of women.<sup>1</sup> Women play important roles in agriculture as they carry out different activities relating to food production,

processing and marketing.<sup>2</sup> Rural women farmers play a vital role in food production and food security and the responsibility placed on the shoulders of women in the rural areas to meet the daily food and need of most families cannot be overemphasized.<sup>3</sup> Many

rural women farmers have poor health status. This could be due to heavy farm work, childbearing and rearing and poor nutrition.<sup>4</sup>

Health, according to the World Health Organization, is a state of complete physical, mental and social well-being and not merely the absence of disease or infirmity and it is a major determinant of the socioeconomic development of people and this is based on the fact that all human endeavours require sound minds in sound bodies for full realization of aspirations.<sup>5, 6</sup> Despite the huge differences that may occur between developing and developed countries of the world, access to health services is the major issue in rural health around the world. Access to health services is particularly low in rural areas, where a large percentage of the population still lives. The few health facilities that are available usually favour urban or wealthy areas. Together with an uneven distribution of health manpower often results in poor availability and poor quality of health services in rural areas.<sup>7, 8</sup> According to WHO, Primary Health Care means essential health care based on practical, scientifically sound and socially acceptable methods made universally accessible to individuals and families in the community through their full participation and at a cost which the country can afford to maintain at every stage of their development in the spirit of self-reliance and self-determination.<sup>9</sup> The community health extension workers (CHEW) in Nigeria were to bring health care as close as possible to where people live and work, and would constitute the first element of continuing health care process.<sup>10</sup> CHEWs are health workers specially trained to provide primary health care in Nigeria. They are members of a community who are chosen by the community members or organizations to provide basic health and medical care to their community.<sup>11</sup> Community health workers

perform a broad range of activities related to health including preventive counselling, health education, behaviour change communication and health promotion, as well as screening, treatment and referral for a range of diseases (malaria, tuberculosis, HIV, among others). In addition, they help mobilize communities for vaccination and other community health activities.<sup>12</sup>

Despite the budget allocated yearly to Nigeria's health sector, the residents of rural communities are deprived of adequate health facilities. The rural people, particularly the rural women, are faced with various difficulties as regards access to proper healthcare services. There is a need to bridge the gap between rural people and health services as their health has an effect on agricultural productivity because the bulk of agricultural activities take place in the rural areas with the rural people, particularly the women, being the major labour force. The health needs of women and girls in rural areas are often neglected, compared to the needs of those in urban areas, and their access to services is often too low. They encounter numerous constraints in accessing affordable, adequate health services in rural areas.<sup>13</sup>

The difficulty in recruiting doctors prompted the use of community health extension workers in rural areas. Despite the training and experience many people are in doubt of their competence to diagnose accurately, talk less of treating endemic disease like malaria.<sup>14</sup> There is a need to determine the perception of rural women on the use of community health extension workers to meet their health needs. In the light of the problems enumerated above, this study sought to describe the socioeconomic characteristics of the rural women in the study area, identify the respondents' level of awareness on the available community health extension services in the study area, examine

respondents' level of access to community health extension services in the study area, and evaluate the effectiveness of community health extension services as perceived by the respondents in the study area.

## METHODOLOGY

The cross-sectional study was carried out in Ilorin East Local Government Area (LGA) of Kwara State between January and June, 2016. Ilorin East is located between latitude 8° 5'N and longitude 4° 5'E. The LGA shares a boundary with Ilorin South, Ilorin West, Moro and Ifelodun LGA, has land area of about 486km<sup>2</sup> and a population of 207,462.<sup>15</sup> The proportion of females was put at 49.5% of the total population.<sup>15</sup> The population of people aged 15 and above was 122,282. The projected population of women between this age group is 60,530 by the year 2016. Majority of the people in Ilorin-East LGA are farmers who engage in the production of crops like melon, maize, locust beans, pepper, cassava and yam. Anecdotal report from the LGA Headquarter at Oke-Oyi indicated that the population of adult women in these selected villages involved in agriculture was about 150.

The sample size for the study was estimated using Fisher's formula<sup>16</sup> for population > 10000,  $n = z^2pq/d^2$  Where  $n$  = the desired sample size;  $z$  = the standard normal deviate set at 1.96 [95% confidence level];  $p$  = the estimated lifetime prevalence of substance use in this population = 50% (i.e. half of the population when  $p$  is unknown, as recommended by Fisher);  $q=1-p$ . Therefore,  $q= 1-0.50= 0.50$ ;  $d$  = absolute precision or sampling error tolerated =5%. The calculated sample,  $n = 384$ . Since the women were less than 10000, a further analysis was done as follows:

$nf = n/1+ (n/N)$ , where  $nf$  is the desired sample size when study population is < 10,000;  $n$  = calculated sample size when study

population is > 10,000;  $N$  = estimate of the population size. Thus,  $nf = 384/1+(384/150) = 107.9 \approx 108$  but considering attrition, 120 was used.

The study population were rural women in Ilorin East LGA of Kwara State. Ilorin East LGA was purposively selected because it has basic health centres. Six rural communities in the LGA were selected using simple random sampling method by balloting. The selected communities were: Sentu, Ile-Apa, Budo-Aare, Alalubosa, Oke-Ose and Oke-Oyi. House listing was done and ten (10) households were selected using simple random sampling method by balloting from each community. Subsequently, two (2) adult women respondents were purposively selected from all listed houses giving a total of twenty (20) respondents from each of the selected communities and a total sample size of 120 respondents from the study area.

Respondents should have been in the community for at least six months in order to be used to the dynamics of rural living and the respondents must have also consented to participate in the study. Rural dwellers who did not meet these criteria were excluded from the study. The study protocol was approved by the Faculty of Agriculture Ethical Committee and the University of Ilorin Central Ethical Committee. Permissions of the Ilorin East Local Government Authority was also sought and obtained through the Supervisory Councillors for Health and Agriculture. Community entrance was further facilitated by the Heads of the respective communities, the *Magajis*, *Baales* or *Alangwa* as appropriate.

Pretesting of the questionnaire was done in Ogbondoroko Community of Asa LGA, Kwara State particularly to test the ease and timing of completing the questionnaire. The questionnaire had earlier been tested for validity and sensitivity by agricultural and

medical experts in the field. The validities and sensitivity was adjudged satisfactory before the pre-test. Data was analysed with Statistical Package for Social Sciences, 18th edition (SPSS-18). Data were presented using frequency distribution, percentage, mean score and ranking and inferential (Pearson product moments correlation) statistics.

Small sample size and exclusive use of only one of the sixteen LGA in Kwara State (out of the 774 LGA in Nigeria) is a limitation to wide generalisation of the findings in this study. Similarly, the study was a cross-sectional study; a follow-up prospective study would be desirable to see the trend of the findings in this study.

## RESULTS

Majority of the women were in the age range 41-50 with a mean age of 45.2 years. They were mainly married and of Islamic faith and had no formal education. The mean household size was 6.2 and lived on average monthly income of ₦14,145.80. All the women in this study showed awareness of community health extension service (Table 1). Table 2 shows the different sources through which the respondents obtained information on community health extension services. Eighty-four percent (84.2%) of the respondents obtained information from their family and friends, 70.8% from radio, 37.5% from their community leaders, 16.7% the Ministry of Health, 5.8% from Extension agents, 3.3% from television and 0.8% of the respondents from newspapers.

**Table 1: Socio-Demographic Characteristics of Respondents**

Variables	Frequency (n=120)	Percent
<b>Age group (years)</b>		
21-30	16	13.3
31-40	26	27.1
41-50	42	35.0
>50	36	30.0
<b>Marital Status</b>		
Single	8	6.7
Widow	29	24.3
Married	83	69.2
<b>Religion</b>		
Islam	90	75.0
Traditional	4	3.3
Christianity	26	21.7
<b>Educational Level</b>		
No Formal education	44	36.7
Quranic	22	18.3
Primary	40	33.3
Secondary	10	8.3
Tertiary	4	3.3
<b>Household Size</b>		
1-5	44	36.7
>5	76	63.3
<b>Arrays of Occupation</b>		
Trader	33	27.5
Farming	48	40.0
Food Vendor	8	6.7
Locust beans processing	16	13.3
Others	15	12.5
<b>Monthly Income (₦)</b>		
5000-10000	97	80.8
>10000	23	19.2
<b>Working Experience (years)</b>		
5-10	39	32.5
10-20	45	37.5
>20	36	30.0

**Table 2: Sources of information of community health extension services**

Sources of information*	Frequency (n = 120)	Percent
Family and friends	101	84.2
Radio	85	70.8
Community leaders	45	37.5
Ministry of health	20	16.7
Extension agents	7	5.8
Television	4	3.3
Newspaper	1	0.8

\*Multiple responses

Maternal and child health care and advice (1<sup>st</sup>), disease prevention and control including treatment (2<sup>nd</sup>), child delivery alongside TBA to isolate poor practices (3<sup>rd</sup>) were the most rated services available while mental health (11<sup>th</sup>) and dental care (12<sup>th</sup>) were the least available (Table 3). Table 4 showed that most of the women (65%) lived more than 3 km

from the health services, 57.5% spent more than 30 minutes and 52.5% access the health services by trekking while 53.3% could not afford the cost of health services. Table 5 showed that first aid treatment (1<sup>st</sup>), immunization (2<sup>nd</sup>) and maternal and child

health care and advice (3<sup>rd</sup>) were ranked most effective while health education including mental health and dental health care were rated least effective by the respondents (11<sup>th</sup> and 12<sup>th</sup>, respectively).

**Table 3: Types and availability of community health extension services in the rural areas**

Services	Always	Sometimes	Rarely	Never	Undecided	Mean	Rank
Maternal and child health care and advice	69 (57.5)	23 (19.2)	18 (15.0)	10 (8.3)	0 (0.0)	4.26	1 <sup>st</sup>
Disease prevention and control including treatment	37 (30.8)	40 (33.3)	24 (20.0)	13 (10.8)	6 (5.0)	3.74	2 <sup>nd</sup>
Child delivery alongside TBA to isolate poor practices	47 (39.2)	28 (23.3)	19 (15.8)	17 (14.2)	9 (7.5)	3.73	3 <sup>rd</sup>
First aid treatment	58 (45.0)	15 (12.5)	17 (14.2)	8 (6.7)	26 (21.7)	3.69	4 <sup>th</sup>
Education on hygiene and sanitation including community mobilization	38 (31.7)	36 (30.0)	20 (16.7)	12 (10.0)	14 (11.7)	3.6	5 <sup>th</sup>
Immunization	35 (29.2)	27 (22.5)	24 (20.0)	34 (28.3)	0 (0.0)	3.52	6 <sup>th</sup>
Promotion of nutrition	26 (21.7)	30 (25.0)	40 (33.3)	24 (20.0)	0 (0.0)	3.48	7 <sup>th</sup>
Home visits	6 (5.0)	44 (36.7)	22 (18.3)	48 (40.6)	0 (0.0)	3.06	8 <sup>th</sup>
Family planning	9 (7.5)	40 (33.3)	13 (10.8)	46 (33.3)	12 (10.0)	2.90	9 <sup>th</sup>
Simple laboratory test and examination	13 (10.8)	14 (11.7)	15 (12.5)	52 (12.5)	26 (21.7)	2.47	10 <sup>th</sup>
Health education including mental health	0 (0.0)	2 (1.7)	2 (1.7)	82 (68.3)	34 (28.3)	1.77	11 <sup>th</sup>
Dental health care	2 (1.7)	0 (0.0)	2 (1.7)	75 (62.5)	41 (34.2)	1.73	12 <sup>th</sup>

**Table 4: Respondents' Access to Community Health Extension Service**

	Frequency (n=120)	Percent
<b>Distance</b>		
≤3km	42	35.0
>3km	78	65.0
<b>Time</b>		
≤30mins	51	42.5
>30mins	69	57.5
<b>Array of Transportation</b>		
Trekking	63	52.5
Personal vehicle	19	15.8
Public transport	38	31.7
<b>Cost of transportation</b>		
Expensive	53	44.2
Affordable	67	55.8
<b>Affordability of services</b>		
Yes	56	46.7
No	64	53.3

**Table 5: Effectiveness of Community Health Extension Services as perceived by the respondents**

Services	Highly effective	Effective	Not effective	Undecided	Mean	Rank
First aid treatment	44 (36.7)	53 (44.2)	19 (15.8)	4 (3.3)	3.14	1 <sup>st</sup>
Immunization	36 (30.0)	58 (48.3)	15 (12.5)	11 (9.2)	2.99	2 <sup>nd</sup>
Maternal and child health care and advice	22 (17.9)	62 (51.7)	34 (28.3)	2 (1.6)	2.87	3 <sup>rd</sup>
Child delivery	23 (19.2)	54 (45.0)	38 (31.7)	5 (4.2)	2.79	4 <sup>th</sup>
Disease prevention and control	16 (13.3)	50 (41.7)	49 (40.8)	5 (4.2)	2.64	5 <sup>th</sup>
Education on hygiene and sanitation including community mobilization	18 (15.0)	43 (35.8)	51 (42.5)	8 (6.7)	2.59	6 <sup>th</sup>
Promotion of nutrition	10 (8.3)	37 (30.8)	71 (59.2)	2 (1.7)	2.46	7 <sup>th</sup>
Home visits	2 (1.7)	30 (25.0)	74 (61.7)	14 (11.7)	2.17	8 <sup>th</sup>
Family planning	8 (6.7)	29 (24.2)	59 (49.2)	24 (20.0)	2.17	8 <sup>th</sup>
Simple laboratory test and examination	0 (0.0)	18 (15.0)	84 (70.0)	18 (15.0)	2.0	10 <sup>th</sup>
Health education including mental health	0 (0.0)	9 (7.5)	77 (64.2)	34 (28.3)	1.79	11 <sup>th</sup>
Dental health care	0 (0.0)	3 (2.5)	80 (66.7)	37 (30.8)	1.72	12 <sup>th</sup>

Age of the respondents significantly but inversely correlated (-0.500,  $p < 0.001$ ) while educational level showed positive correlation (0.334,  $p < 0.001$ ) with availability of community health extension services (Table 6).

**Table 6: Correlation between availability of community health extension services and some selected socio-demographic characteristics**

Variable	Coefficient	p-value	Remarks
Age	-0.500	$< 0.001$	Significant
Educational level	0.334	$< 0.001$	Significant
Household size	-0.153	0.095	Not significant
Working experience	-0.124	0.176	Not significant
Income	0.155	0.092	Not significant

Correlation is significant at 0.01 (2-tailed)

## DISCUSSION

The study showed that less than half of the women were within the age range of 41-51 years with a mean age of 45 years. Majority of the women were married. This implies that their marital status is likely to confer additional responsibilities on them such as taking their children to the healthcare centres and also making themselves available to some other community health extension services in their area. Majority of the respondents were Muslims. This preponderance of Muslims is in keeping with the higher Muslim population in the Ilorin LGA studied. Substantial proportion of the population had no formal education. This is a major problem of rural communities, particularly the lower female education that has been documented in previous studies.<sup>4-7</sup> This study thus supports those findings. The low literacy level indicated by the women could, influence their perception and acceptance of Community Health Extension Services available in the area.

The household size of the respondents in this study is higher than the value recommended by the National Bureau of Statistics (NBS)

which is 5 persons in a rural household (NBS 2006).<sup>17</sup> The primary occupation indicated by the women was mainly farming. These findings support earlier studies that showed that majority of rural women were actively involved in farming in Nigeria.<sup>18</sup> The average monthly income of respondents in the study was ₦14,146 which is far below the minimum wage (₦18,000) in the Nigerian Civil Service. One can infer from this that these rural women are living below poverty line. Income and educational levels have been reported to influence the access of women to health services in the community.<sup>19</sup>

The high awareness of the respondents on community health extension services was remarkable despite the fact that the literacy level of women in the study area was low. Health education through family members, friends and the electronic media especially through the radio which is reported as a source of information on health related issues by a high proportion of the respondents could be responsible for the high awareness obtained in the study. Further studies might be needed to ascertain this finding.

Maternal and child healthcare, disease prevention and control, child delivery, first aid treatment, education on hygiene and sanitation, immunization and promotion of nutrition were the most available community health extension services reported in this study respectively. Availability of home visit services was reported by low proportion of the respondents in this study. This negates the essence of community health extension service which is key to achieving optimal benefits of Primary Health Care. A study carried out in Sarka and Gosh<sup>20</sup> observed that physical accessibility is a measure of the ease or difficulty of reaching a particular service. Majority of the respondents in this study have to travel far to reach a health facility and this can be a constraint to the use available

community health extension services in the local. A study on the relationship between distance and utilization of healthcare facilities by Sanni<sup>21x</sup> found that fewer people tend to patronize a particular facility as the distance from it increases.

This study revealed that majority of the women arrived at the health centres by foot with a few of them accessing the facilities using their personal vehicles. However, majority of the respondents reported that the cost of transportation was affordable but the services rendered in the health facilities were not affordable. Access to facilities with community health extension services was also reported to be relatively far away from the residence of the respondents. A similar finding was reported in Ghana.<sup>22</sup>

First aid treatment was the most effective community health extension service used by the rural women while dental and mental health care were reported to be the least effective services including home visits the least effective. Despite the fact that primary dental and mental health care are components of Primary Health Care in Nigeria, the impact of these has probably not been felt at the rural communities. Efforts must therefore be strengthened to reach the needy rural dwellers.

In this study, older respondents reported frequent availability of community health services to them ( $p < 0.001$ ). Also, educational level ( $r = 0.334$ ,  $p < 0.01$ ) shows a positive significant relationship with the frequency of availability of community health extension services to the rural women. Rural women with lower level of education had greater chances of community health extension services being available to them as revealed in this study. The more literate respondents reported lesser availability of community health extension services to them. This result

is in accordance with the findings of Mekonnen and Mekonnen<sup>23</sup> that utilization of modern health facilities increases with educational attainment. The explanation could be that the more educated rural women, rather than use community health services, move to town and cities to access secondary and tertiary health services.

## CONCLUSION

The findings of the study have shown a high level of awareness of community health extension services among the respondents despite the fact that the literacy level of the respondents was observed to be low. The health centres where community health extension services are provided are relatively far away from where the respondents reside making access to community health extension services more challenging and home visits were not given priority attention and this negates the whole essence of extension service delivery through home and farm visits. Community health extension workers are therefore encouraged to employ home visits as a strategy for the delivery of health care services. Government and NGOs should ensure adequate training, support and supervision of the community health extension workers to enable them deliver effective services to the rural people.

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